

To: Ackerman, Joyce[Ackerman.Joyce@epa.gov]; Ostrander, David[Ostrander.David@epa.gov];
Dunkelman, Tom[Dunkelman.Tom@epa.gov]
From: Ruhl, Christopher
Sent: Tue 9/8/2015 2:21:26 PM
Subject: RE: The FLAC - Flocculant, Lime and Caustic Report

Thanks Joyce, this is very helpful. Can you verify whether we think we will use caustic in the future?

Chris Ruhl

USEPA R6 Oil Team Leader

Federal On Scene Coordinator

(214) 665-7356 office

From: Ackerman, Joyce
Sent: Tuesday, September 08, 2015 7:41 AM
To: Ostrander, David; Ruhl, Christopher; Dunkelman, Tom
Subject: FW: The FLAC - Flocculant, Lime and Caustic Report

I am providing this to the Incident Commanders. I have not included the PIO's or anyone else on this yet.

Please note the disclaimers in the report – the mine team will have to track down the START log books to fill in the missing days.

I think it is important to note that the flocculent was provided to EPA by the Colorado Division of Reclamation, Mining, and Safety (DRMS), experts in abandoned mines.

Joyce Ackerman

On-Scene Coordinator and START P.O.

U.S. EPA Region 8

1595 Wynkoop Street

Denver, CO 80202

(303) 312-6822

From: Dhieux, Joyel

Sent: Monday, September 07, 2015 10:20 PM

To: Ackerman, Joyce

Cc: Way, Steven; Myers, Craig; Griswold, Hays; Guy, Kerry

Subject: The FLAC - Flocculant, Lime and Caustic Report

Hi Joyce,

I've attached a copy of the Flocculant, Lime and Caustic Report or FLAC report. This is a very preliminary report. While I was not able to compile all of the data on such short notice, it provides a general idea of the quantities of caustic, lime and/or floc used in water treatment at the site. Ideally, we would have time to review and cross-check the data that I've compiled from the log books and situation reports. In addition to the report, I've attached a copy of the MSDS sheet for the floc.

As you'll see in the report, the caustic, lime and flocculant used in the water treatment at Gold King varied as the system was modified and refined. The amounts also varied depending on weather conditions, water quality data, and site conditions. We continue to monitor water quality parameters at the site daily.

Joyel

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Joyel Dhieux

Federal On-Scene Coordinator

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